



## A CROSS-SECTIONAL STUDY TO ASSESS THE INFERTILITY FACTORS AMONG REPRODUCTIVE AGE COUPLES IN A RURAL POPULATION

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### KEYWORDS :

#### INTRODUCTION

##### Background of the study

Infertility is a serious health problem worldwide which affects nearly 9 to 11% of couples globally. India constitutes about one-fourth of the problem every year worldwide. According to a data from World Health Organization (WHO), one in every 4 couples in developing countries is affected by infertility. The magnitude of the problem calls for immediate solution, especially when the majority of infertility cases are avoidable.

India is a country with a wide diversity. There is diversity in customs, traditions, quality of living, accessibility to health-care systems, and also climatic conditions. Due to these factors, infertility rate varies widely not only among various states but also across tribe and castes within the same area. In addition to the core prevalence of infertility due to physiological conditions, additional cases are caused by the incidence of preventable conditions such as infection, menstrual hygiene, lifestyle factors, advancing maternal age, age at marriage, postponement in childbearing for more than 1 year or more, socioeconomic status, and occupational hazards.

##### Need for the study

The WHO defines infertility as “a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse”.

Infertility can be caused by a number of varied factors, in either the male or female reproductive systems. It could be either the man or woman who has a problem, but in India, the woman is usually held responsible. It becomes a personal health issue, leading to financial and emotional stress and social stigma.

##### Statement of the problem

A cross-sectional study to assess the infertility factors among reproductive age couples in a rural population, Gudiyatham

##### Objectives

- To assess the infertility risk factors among couples in rural population

##### Delimitations

Those who

- Are willing to participate in the study
- Have attended the medical camp on infertility
- Understand English/Tamil

#### METHODOLOGY

Research design is the framework for addressing a research question including strategies for enhancing the study's integrity. The present study was conducted to assess the infertility risk factors among couples in rural population, Gudiyatham.

##### Research approach

A research approach is the methodology of the research aspect used in the study. Quantitative approach was adopted to assess the infertility risk factors among couples in rural population, Gudiyatham.

##### Research design

A research design is the heart and soul of the research. The investigators had chosen the descriptive survey design.

##### Research setting

The setting is the place at which the research study is carried out. The study was conducted in Atthi hospitals, Gudiyatham.

##### Population

A population is the complete set group of individuals, whether that group comprises a ratio or group of people with a common characteristic. In statistics, a population is the pool of individuals from which the statistical sample is drawn for a study.

It includes all the individuals whom the researcher is interested.

##### Target population

The target population of the present study was all the couples with infertility

##### Accessible population

The accessible population of the present study was all the couples with infertility in Atthi hospitals, Gudiyatham

##### Sample

It is a relatively small group of selected number of individuals drawn from a particular population and is used to throw light on the population characteristics. The samples of the study were all the couples with infertility and met with the inclusion criteria. A total of 42 participants (21 couples) who fulfilled the inclusion criteria were selected as the samples using purposive sampling technique.

##### Sample size

Sample size is the number of couples participating in the study. The sample size is determined based on the type of the study, variables being studied, the statistical significance required, and availability of samples and feasibility of conducting the study. In the study, 42 participants (21 couples) were selected for the purpose of data collection.

##### Sampling technique

Sampling technique is the method in which samples were identified. In this study, the sample was selected by purposive sampling technique. Criteria for sample selection

##### Inclusion criteria

###### Couples who are

- Present at the time of data collection
- Able to comprehend and write in English and Tamil
- Willing to participate in the study

##### Exclusion criteria

###### Couples who are

- Who are absent at the time of data collection
- Who are not willing to participate

##### Development of tool

The tool used for the study was:

##### Section - 1: Demographic variables

The demographic variable is designed to collect the sample characteristics. The demographic variable consists of the following items respectively namely education, type of diet, type of residence, type of family, type of marriage, etc.

**Section - 2: Clinical variables**

The clinical variable is designed to collect the sample characteristics. The clinical variable consists of the following items respectively namely blood pressure, body mass index, etc.

**Ethical considerations**

Before collecting the data, the purpose and duration of the study, and the things expected to be realized within the scope of the study were clearly explained to the couples; their questions were answered, and then the written and verbal consents were obtained from every participant. Anonymity and confidentiality of the participants were safeguarded by the researcher in the study.

**Data collection procedure**

The consent was obtained for conducting the study. The investigator used structured interview schedule for data collection. The data collection was done by the investigator after getting consent from the study subjects.

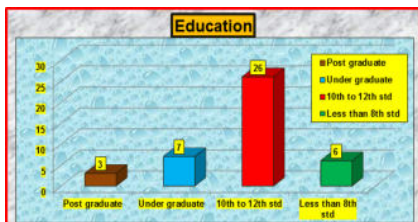
Brief information about self and the purpose of the study was explained to the couples, privacy was provided and confidentiality regarding the data was assured to them so as to get their co-operation in the procedure of data collection.

**Data analysis plan**

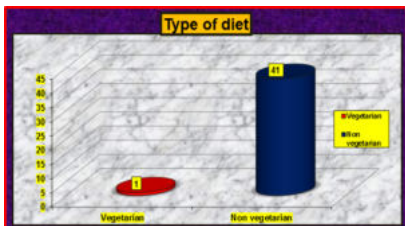
- Frequency and percentage distribution to analyze the demographic variables.

**RESULT AND FINDINGS**

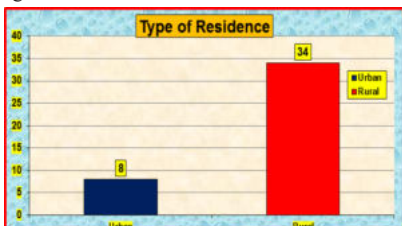
**a) Demographic variables**



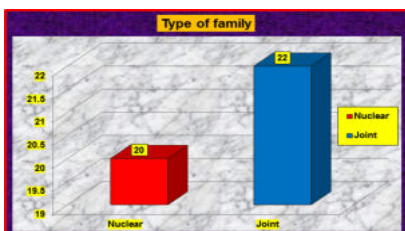
With regard to education, 3 were post graduates, 7 were under graduates, 26 were between 10<sup>th</sup> to 12<sup>th</sup> std and 6 were less than 8<sup>th</sup> std.



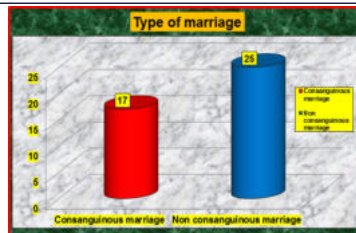
With regard to type of diet, one was vegetarian and the remaining 41 were non vegetarians.



With regard to type of residence, 8 belong to urban and 34 belong to rural.

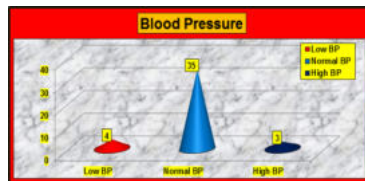


With regard to type of family, 20 belong to nuclear and 22 belong to joint family.

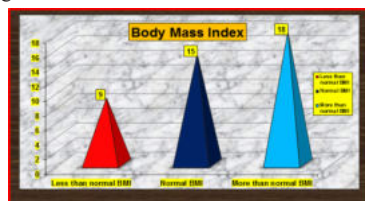


With regard type of marriage, 17 were consanguineously married and 25 were non-consanguineously married.

**b) Clinical variables**



With regard to blood pressure, 4 had low BP, 35 had normal BP and three had high BP.



With regard to body mass index, 9 had less than normal BMI, 15 had normal BMI and 18 had more than normal BMI.

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